Worksheet 5. Application Summary

03-0005

This worksheet will be posted on the web to notify the public of requests for critical use exemptions beyond the 2005 phase out for methyl bromide. Therefore, this worksheet cannot be claimed as CBI.

1. **Consortium Name:** Michigan Cucurbit Growers
2. **Location:** Michigan, USA
3. **Crop:** Cucurbits including: watermelon, cucumber, summer squash, winter squash
4. **Pounds of Methyl Bromide Requested** 2005 62,142 lbs.
5. **Acres Treated with Methyl Bromide** 2005 1,446 Acres
6. **If methyl bromide is requested for additional years, reason for request:**
   Additional time is needed to develop effective alternatives for *Phytophthora capsici*. Michigan State University has an active research program, and is making progress in disease management.

2006	60,970	lbs.	Area Treated	1,419	Acres
2007	58,625	lbs.	Area Treated	1,364	Acres

Place an "X" in the column(s) labeled "Not Technically Feasible" and/or "Not Economically Feasible" where appropriate. Use the "Reasons" column to describe why the potential alternative is not feasible.

Potential Alternatives	Not Technically Feasible	Not Economically Feasible	Reasons
1,3-Dichloropropene, Chloropicrin	X		Not effective.
1,3-D, Metam Sodium	X		Not effective.
Metam Sodium, Crop Rotation	X		Not effective. Pathogens long-lived.
Biofumigation	X		Efficacy is not proven, requires solarization.
Solarization	X		Climate in Michigan, USA is too cold.
Steam	X		Not technically feasible for large scale agriculture.
Biological Control	X		Efficacy is not proven.
Cover Crops, Mulching	X		Not effective, already used in commercial production.
Crop Rotation, Fallow	X		Not effective, pathogens long-lived, already used in commercial production.
Endophytes	X		Efficacy is not proven.
Flooding, Water Management	X		Flooding is not feasible, trickle and raised beds are used, but frequent heavy rains favor disease.
General IPM	X		Utilized by growers, but is not adequate for disease control.
Grafting, Resistant Rootstock, Plant Breeding	X		Resistant rootstock has not been identified. Would not be effective against root rot.
Organic Production	X		Not effective, many growers already using techniques.
Resistant Varieties	X		Resistant varieties have not been identified.
Soilless Culture	X		Volcanic ash, rockwool are not viable alternatives for large-scale production in Michigan USA.
Substrates, Plug Plants	X		Primary pathogens are not disseminated on seed or transplants.